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WIRELESS BACKUP COMMUNICATION LINK FOR VEHICLE CONTROL

ABSTRACT

Methods and apparatus are provided for controlling drive-by-wire vehicle operation using redundant wireline and wireless communication links. Outputs received from a driver controlled vehicle feature are interpreted by a functional control module and converted to actuator commands to be transmitted over either the wireline or wireless communication link to an actuator to execute the driver desired maneuver or vehicle function (e.g., steering, braking, lights, etc.). A communication controller periodically tests the communication links to determine which are operative. Under normal conditions the commands are transmitted over the wireline communication link. If the wireline communication link fails the commands are automatically switched to the wireless communication link. If both links fail, a failsafe strategy is initiated.